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| APPLICATION NO.   | FILING DATE               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---------------------------|----------------------|---------------------|------------------|
| 10/849,500  | 05/20/2004                | Joseph Bishop        | 005618-012          | 6012             |
| 21839   | 7590 10/24/200            | 5                    | EXAM                | INER             |
|   | AN INGERSOLL PO           | SAFAVI, MICHAEL      |                     |                  |
| (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 |                           |                      | ART UNIT            | PAPER NUMBER     |
| ALEXAND   | ALEXANDRIA, VA 22313-1404 |                      | 3673                |                  |

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)  |  |  |  |  |
|---|---|---------------|--|--|--|--|
| 0.00  | 10/849,500  | BISHOP ET AL. |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit      |  |  |  |  |
|   | M. Safavi   | 3673          |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |               |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |               |  |  |  |  |
| Status  |   |               |  |  |  |  |
| 1) Responsive to communication(s) filed on  | Responsive to communication(s) filed on   |               |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  | •   |               |  |  |  |  |
| 3) Since this application is in condition for allowar   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |               |  |  |  |  |
| closed in accordance with the practice under E  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                       |               |  |  |  |  |
| Disposition of Claims   |   |               |  |  |  |  |
| 4)⊠ Claim(s) <u>1-48</u> is/are pending in the application.   |   |               |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |               |  |  |  |  |
| 5) Claim(s) is/are allowed.   | 5) Claim(s) is/are allowed.   |               |  |  |  |  |
| 6)⊠ Claim(s) <u>1-24, 27-35, and 38-48</u> is/are rejected.   |   |               |  |  |  |  |
| 7)⊠ Claim(s) <u>25,26,36 and 37</u> is/are objected to.   | )⊠ Claim(s) <u>25,26,36 and 37</u> is/are objected to.  |               |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |   |               |  |  |  |  |
| Application Papers  |   |               |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |               |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |               |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |               |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |               |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |               |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |               |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>   |   |               |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |               |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |               |  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>  | Paper No(s)/Mail Da   |               |  |  |  |  |

## Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: '223'. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 27 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention. The specification does not appear clear and complete as to any "slidable terrain engaging device...arranged between a lower surface of the base and a ground-contacting portion of the plurality of wheels". For example, how would such slidable, terrain engaging device be arranged or attached to the lift-assisted device?

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 27, 28, 44, 45, 47, and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 27 and 28 present a "slidable terrain engaging device... arranged between a lower surface of the base and a ground-contacting portion of the plurality of wheels" when the specification does not appear to specifically set forth how such slidable, terrain engaging device would be arranged or attached to the lift-assisted device.

Claim 44, line 1-2, "the patient transport portion" lacks antecedent basis within the claim. To what does "the patient transport portion" refer?

Claim 47 appears dependent upon claim 30. However, claim 30 is directed to a "lift-assisted device" while claim 47 appears directed to a "mobile lift-assisted device".

Therefore, it is not clear as to what the language of claim 47 defines.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 15, 16, 18, 27, and 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Foster et al. '113. Foster et al. '113 discloses, Figs. 1, 3, 5, and 6, a lift assisted device 10 having a patient support structure 100 having a movable yoke 60, a base 30, an undercarriage 46/48/70 extending between the patient support structure and the base, and at least one pneumatic cylinder 72/74 extending between the movable yoke and a part of the patient support structure for applying a driving force on the movable yoke to raise or lower the patient support structure with respect to the base, (claims 1 and 2). The undercarriage has a member 50, 54a, for example, attached to the movable yoke for raising or lowering the patient support structure with respect to the base, (claim 3). Plurality of wheels of "monocoque" construction is at 36, (claims 15 and 16). Attachment point is any portion of base, (claim 18). Slidable terrain engaging device mounted to the base is/are wheels 36, (claim 27). Loading wheel is any of 36 at either end, (claim 29). The wheel 36 is in the form of a pivotal caster, col.

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5, lines 48-52, which inherently meet the limitations to movable support structure for attaching the at least one loading wheel to the patient support structure, the movable support structure fitting partially within a recess in the patient support structure, the movable support structure including a first end part arranged for slidable engagement with the patient support structure and a second end part supporting the loading wheel and being pivotally connected to the first end part", (i.e., the spindle of the caster is movable, (slidable), within the frame of the support structure with a second end part, (see Figs. 2 and 3), supporting the wheel and pivotally connected to the spindle or first end part, (claims 30-32).

Claims 1-3, 8-12, 15, 16, 18-24, 27, 29-35 and 38-48 are rejected under 35

U.S.C. 102(b) as being anticipated by Schirmer '622. As for claims 1, 15, 16, 23, 24, and 33, Schirmer '622 discloses, Figs. 3, 4, 9-11, 13, 14, 15, 18, and 19, a patient support structure having a movable part 22, a base 14 with "monocoque" wheels 24, an undercarriage or yoke 18 extending between the patient support structure and the base, a power source for applying a driving force to raise or lower the patient support structure with respect to the base, and a height adjustment and locking mechanism including a locking bar 116/42 positioned for locking engagement with the movable part of the patient support structure. The undercarriage 18 has a member 28 with an end 32 attached to the movable part 22 of the patient support structure, and wherein the undercarriage member and the movable part of the patient support structure are adapted to move in response to the driving force, (claim 34). The undercarriage

member has another end 38 pivotally attached to the base, (claim 35). Schirmer's height adjustment and locking mechanism has a control device adapted for simultaneous powering of the power source and disengagement of the locking bar, col. 8, lines 20-36, (claim 38). Schirmer includes a valve for operating the power source and a linkage between the locking bar and to the control device for rotating the locking bar col. 8, lines 8-38, (claim 39). As such, Schirmer's control device controls the valve and the linkage, (claim 40). The patient support structure comprises a hollow body 44 forming a support for the at least one pneumatic cylinder 46/50 with the hollow body having at least one recess extending through the hollow body for housing the at least one pneumatic cylinder 46/50, (claims 8 and 9). The hollow body has at least one additional recess for storing a tank of compressed gas 80, (claims 10). The patient support structure includes a hinged head portion and a hinged foot portion 22', 22", each of the head portion and the foot portion being pivotally connected to the hollow body, Fig. 21. The patient support structure includes a lifting cylinder with control handle, (seen to the left of tank 80 in Figs. 4 and 15), arranged to maintain the head portion in a raised position, (claims 11, 12, and 22). Attachment point is any portion of base, (claim 18). At least one compressed gas cylinder 80 is in communication with at least one pneumatic cylinder 46/50 with the compressed gas cylinder constituting a self contained breathing apparatus tank with compressed gas cylinder is an oxygen tank, (claims 19-21). Slidable terrain engaging device mounted to the base is/are wheels 24. (claim 27). Loading wheel is any of 24 at either end, or at 92, (claim 29). The wheel 36 is in the form of a pivotal caster, col. 5, line 17, which inherently meet the limitations to

movable support structure for attaching the at least one loading wheel to the patient support structure, the movable support structure fitting partially within a recess in the patient support structure, the movable support structure including a first end part arranged for slidable engagement with the patient support structure and a second end part supporting the loading wheel and being pivotally connected to the first end part", (i.e., the spindle of the caster is movable, (slidable), within the frame of the support structure with a second end part, (see Fig. 18), supporting the wheel and pivotally connected to the spindle or first end part, (claims 30-32).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster al. '113 in view of either of Rudolf et al. '372 and Soltani '141.

Rudolf et al. '372 teaches, Figs. 2, 5, and 6, application and utilization of spring loaded, monocuoqe, castered wheels while Soltani '141 teaches, Figs. 1 and 2, application and utilization of spring loaded, monocuoqe, castered wheels. To have provided the Foster et al. patient transport assembly with spring loaded, monocuoqe, castered wheels, thus allowing varying effects of the wheel, would have been obvious to

one having ordinary skill in the art at the time the invention was made as taught by either of Rudolf et al. and Soltani.

Claims 41, 42, and 44-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferneau et al. '935 in view of Robertson et al. '393.

For purposes of examination Examiner considers claim 47 to depend from claim 45. Ferneau et al. '935 discloses, Figs. 1a and 1b, a patient transport device with a base 1 having wheels 2, a patient support structure 9, and an undercarriage 7/8 for raising and lowering the support structure. A power source is received within the "patient transport portion", (paragraph 26), thus received within a recess of the "patient transport portion". Ferneau et al. discloses that the power source may include a pneumatic cylinder which would intrinsically include a compressed gas holder or tank. Ferneau et al. does not appear to specify the device being formed of a composite material of resin and carbon fibers.

However, Robertson et al. '393 teaches forming a patient transport device of a composite material of resin and carbon fibers, col. 5, lines 46-54. Therefore, to have formed the Ferneau et al. patient transport device of a composite material of resin and carbon fibers, thus providing a sturdy frame structure for the transport device, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Robertson et al.

Claims 41-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders '587 in view of Robertson et al. '393.

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Saunders '587 discloses, Figs. 1-3, a patient transport device with a base 1 having wheels 5, a patient support structure 2, and an undercarriage 10-13 for raising and lowering the support structure. A power source 25 is received within the "patient transport portion", thus received within a recess of the "patient transport portion". A hydraulic fluid tank is in operative communication with the power source. First and second scissors linkage members 10/11 are slidably connected to the patient transport surface, via recessed track with bearing at 18, and pivotally connected to the base. Saunders does not appear to specify the device being formed of a composite material of resin and carbon fibers.

However, Robertson et al. '393 teaches forming a patient transport device of a composite material of resin and carbon fibers, col. 5, lines 46-54. Therefore, to have formed the Saunders patient transport device of a composite material of resin and carbon fibers, thus providing a sturdy frame structure for the transport device, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Robertson et al.

Claims 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders '587 in view of Robertson et al. '393 as applied to claims 41-46 above, and further in view of Ferneau et al. '935, Schirmer '622, and Foster et al. '113.

Arguments to Arguments to each of Saunders, Ferneau et al., Schirmer, and Foster et al. can be found above. To have replaced the hydraulic cylinder, including

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supply and power source, of the modified Saunders patient support with a pneumatic cylinder with power source and gas supply, thus offering an alternate and more efficient power medium, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by any of Ferneau et al. '935, Schirmer '622, and Foster et al. '113.

Claims 41, 42, and 44-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schirmer '622 in view of Robertson et al. '393.

For purposes of examination Examiner considers claim 47 to depend from claim 45. Schirmer '622 discloses, Figs. Figs. 3, 4, 9-11, 13, 14, 15, 18, and 19, a patient transport device with a base 14 having wheels 24, a patient support structure 22, and an undercarriage 18 for raising and lowering the support structure. A power source is received within the "patient transport portion", (See for example Fig. 22), thus received within a recess of the "patient transport portion". Schirmer discloses that the power source may include a pneumatic cylinder46/50, 126, 128 which include a compressed gas tank 80. Schirmer does not appear to specify the device being formed of a composite material of resin and carbon fibers.

However, Robertson et al. '393 teaches forming a patient transport device of a composite material of resin and carbon fibers, col. 5, lines 46-54. Therefore, to have formed the Schirmer patient transport device of a composite material of resin and carbon fibers, thus providing a sturdy frame structure for the transport device, would

have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Robertson et al.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schirmer '622 in view of either of Rudolf et al. '372 and Soltani '141.

Rudolf et al. teaches, Figs. 2, 5, and 6, application and utilization of spring loaded, monocuoqe, castered wheels while Soltani teaches, Figs. 1 and 2, application and utilization of spring loaded, monocuoqe, castered wheels. To have provided the Schirmer patient transport assembly with spring loaded, monocuoqe, castered wheels, thus allowing varying effects of the wheel, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of Rudolf et al. and Soltani.

Claims 1-10, 13-16, 18-22, 27, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders '587 in view of any of Ferneau et al. '935, Schirmer '622, and Foster et al. '113.

Arguments to each of Saunders, Ferneau et al., Schirmer, and Foster et al. can be found above. To have replaced the hydraulic cylinder, including supply and power source, of the Saunders patient support with a pneumatic cylinder with power source and gas supply, thus offering an alternate and more efficient power medium, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by any of Ferneau et al., Schirmer, and Foster et al. With such a

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modification Saunders would possess a compressed air tank within a recess in place of tank 30 with pneumatic cylinders 21 within a recess or hollow body of the gurney, (claims 8-10). Plurality of wheels of "monocoque" construction is at 5, (claims 15 and 16). Attachment point is any portion of base, (claim 18). Slidable terrain engaging device mounted to the base is/are wheels 5, (claim 27). Loading wheel is any of 5 at either end, (claim 29). The wheel 5 is in the form of a pivotal caster, col. 2, line 11, which inherently meet the limitations to movable support structure for attaching the at least one loading wheel to the patient support structure, the movable support structure fitting partially within a recess in the patient support structure, the movable support structure including a first end part arranged for slidable engagement with the patient support structure and a second end part supporting the loading wheel and being pivotally connected to the first end part", (i.e., the spindle of the caster is movable, (slidable), within the frame of the support structure with a second end part, (see Fig. 1), supporting the wheel and pivotally connected to the spindle or first end part, (claims 30-32). At least one compressed gas cylinder 30 would be in communication with at least one pneumatic cylinder 21 with the compressed gas cylinder constituting a self contained breathing apparatus tank with compressed gas cylinder is an oxygen tank, (see particularly Ferneau et al. and Schirmer), (claims 19-21). A valve 36, 40 would be in communication with the at least one pneumatic cylinder with a control handle 26 in communication with the valve for providing compressed gas to the at least one pneumatic cylinder, (see particularly Ferneau et al. and Schirmer), (claim 22).

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders '587 in view of any of Ferneau et al. '935, Schirmer '622, and Foster et al. '113 as applied to claims 1-10, 13-16, 18-22, 27, and 29-32 above, and further in view of either of Rudolf et al. '372 and Soltani '141.

Rudolf et al. teaches, Figs. 2, 5, and 6, application and utilization of spring loaded, monocuoqe, castered wheels while Soltani teaches, Figs. 1 and 2, application and utilization of spring loaded, monocuoqe, castered wheels. To have provided the modified Saunders patient transport assembly with spring loaded, monocuoqe, castered wheels, thus allowing varying effects of the wheel, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of Rudolf et al. and Soltani.

Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Foster et al. '113 and Schirmer '622 in view of any of Ferneau et al. '148, Tulette '533, and Ferneau et al. '334.

Arguments to each of Foster et al. '113 and Schirmer '622 can be found above. To have provided either of Foster et al. '113 and Schirmer '622 with means to ease traveling over any given terrain would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Ferneau et al. '148 at 87, Tulette '533 at 30 or 50, and Ferneau et al. '334 at 114.

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Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders '587 in view of any of Ferneau et al. '935, Schirmer '622, and Foster et al. '113 as applied to claims 1-10, 13-16, 18-22, 27, and 29-32 above, and further in view of any of Ferneau et al. '148, Tulette '533, and Ferneau et al. '334.

To have provided the modified Saunders '587 with means to ease traveling over any given terrain would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Ferneau et al. '148 at 87, Tulette '533 at 30 or 50, and Ferneau et al. '334 at 114.

Claims 25, 26, 36, and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (571) 272-7046. The examiner can normally be reached on Mon.-Thur., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (571) 272-7049. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

M. Safavi September 25, 2005

MICHAEL SAFAVI PRIMARY EXAMINEM ART UNIT 234